HYDNUM CAPUT-MEDUSAE.

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Hydnum Caput-Medusae is a fungus apt to be conspicuous in the minds of those newly attracted to observe and collect our fleshy fungi. Its name has a definite suggestiveness, it belongs to a genus readily recognized, and it is pictured or described in popular accounts as such a remarkable and fascinating object that every true fungus-hunter longs to find it, photograph it, possess it, exhibit it, and even, it may be, to eat it. That such a desire (in which the writer may admit his share) is prevalent and determined, is evident from the numerous reports that go about every season of the finding of the Medusa hydnum, and from the frequent despatch to the centres of information of specimens so labeled. Unfortunately for the satisfaction of ardent collectors, it is only too probable that they are in most cases deceived; ten to one, at least, they have something else. Hence, it is by way of warning against such a common mistake that attention is here called to certain other species which are the innocent cause of it.

If the reader will turn to Stevenson's British Fungi, or to Massee's British Fungus Flora, he will find described along with this species, two others somewhat similar, H. coralloides (Coral hydnum) and H. Erinaceus (Hedgehog hydnum), and if he will examine also plate seven of the first volume of Fries's Icones and the accompanying description (p. 9), he will learn details of a fourth species, H. Caput-ursi (Bear's-head hydnum) even more like his probable notion of H. Caput-Medusae. All of these four species are large, white, and provided abundantly with long fleshy spines, and all, except the Coral hydnum, generally have a firm, fleshy body. No exhaustive description of them need be given here, it being the writer's intention mainly to awaken, in the minds of uninformed readers, a feeling of uncertainty that will be banished only by a careful study of the details given in the references mentioned. Still, it may be well to point out that the Coral hydnum is fairly distinct by reason of its comparatively delicate branching habit. Of the others, the Hedgehog hydnum is not at all branched but is tuberculose and has very long spines, and is somewhat lacerate fibrillose above; the Medusa hydnum is also unbranched,

¹ See also C. H. Peck, Report of the State Botanist of New York for 1897. Pp. 310, 311,

is tuberculiform, has long spines, though shorter than those of the last, and finally, as the name would indicate, has a suggestion of the Gorgon locks in the distorted character of the upper spines; the Bear's-head hydnum, which has a tubercular body like the last two, differs, as is easily seen in section, by being covered with short branching processes from which the spines depend.

In Fries's descriptions some prominence is given to the statement that *Hydnum Caput-Medusae* turns smoky or ashen with age, and not dingy yellowish or brown like the others, but it must be remembered that he admits that up to the time of the publication of his Hymenomycetes Europaei (1874), he had seen only a plate of this species. The others he knew in their growing state, and *H. Caput-ursi* is a species of his own making.

All four species are found in this country, but that the Medusa hydnum is not common is plain from the following remarks which the writer is permitted to quote from a letter from Professor Peck: "You correctly surmise that I have received specimens of Hydnum coralloides and H. Caput-ursi from correspondents who took them to be H. Caput-Medusae. I have never seen typical specimens of this species from this country, but I have received from western New York and from Missouri, specimens that might be referred to it by some, since the agreement was very good except in color. They had spines on the upper surface, that by a little stretch of the imagination might be called 'contorted,' though they really were merely wavy or flexuous. In no case have these, or any others that have come to me, shown any dingy gray or sooty cinereous color, and, as they have indicated a somewhat ramose-cancellate' structure within, I have considered them only a variation of H. Erinaceus. . . . In the fifty-first report, which I expect will soon be issued [January, 1899] I have given a figure of H. Caputursi, as it occurs in our state. I have thought it desirable to do so in order to correct the too prevalent false notions concerning it as well as to illustrate our edible species."

Enough has been said to show that Hydnum Caput-Medusae, however definitely imagined, is by no means easily discovered or determined when found. It may justly be inferred, moreover, that distinctions between it and others are not too well known. It is none the less deserving or attractive as an object of search. On the contrary there is offered to every observer the interesting problem of straightening out the difficulties of the case for himself, and of making abundant collections and careful studies to this end. Unless this plan is followed, the hydrum with the Gorgon locks is likely to remain for most of us in more senses than one a mythical plant.

On some variations of Spiranthes cernua.—During the last week of September, 1898, I noted in an alluvial meadow in Williamstown, Massachusetts, some variations of the common Spiranthes cernua, which, so far as I am aware, have never been recorded. The observations I was then able to make showed that there exist apparently three fairly distingishable forms of this plant.

The alluvial meadow where these observations were made is bordered on one side for a distance of about half a mile by a swamp. On visiting the locality the past fall I noticed that the plant growing rather profusely along the edge of the swamp differed in some notable points from the Spiranthes cernua with which I was hitherto familiar. The most obvious difference was that of color. The ordinary S. cernua, as I have found it in various parts of this, as well as other regions, is a pure white, or very nearly so, but the present form was a very pronounced yellow or cream-color. In this yellow form the rich fragrance of the ordinary white plant was invariably lacking; and the lip of the flower was shorter, broader, and more rounded, or in some cases almost two-lobed. The leaves also appeared quite distinct, both in shape and structure. The plant appearing through the whole meadow was the yellow form. There were, however, confined to a small area of a few square rods, a few specimens of the ordinary white fragrant form, and some distance away there was a similar area of an apparently intermediate plant, white-flowered, but without fragrance, and with all the other characteristics of the yellow-flowered form. Each type was confined to its own area, and, so far as observed, the characters of each seemed fixed. Further observations are needed, however, to establish this point, for, unfortunately, I was not able at the time to examine the plants more in detail.

I have very recently learned that similar observations on this species have been made about Manchester, New Hampshire, by Mr. F. W. Batchelder, and on Mount Desert Island, by Mr. E. L. Rand, and it is hoped that others may bear in mind this variation during the coming fall. — A. LeRoy Andrews.